DECEMBER, 1829,

PART I.

ORIGINAL CORRESPONDENCE.

ART. I.—On Secret Prices, and their Effects on the Interest of the Factors; by A FACTOR.

OBSERVATIONS BY THE EDITOR.

It was our intention to have noticed our visitor "Paul Pry," but instead of this, we strongly urge all our friends to take the subject of the following paper into their serious consideration. The Factor states the circumstances of the case in a plain but forcible manner, and if we can add any weight to his arguments by saying all our experience in business goes to confirm the truth of his statement, we do it willingly.

Every thing like secrecy ought to be discouraged and put down by the planters, as soon as possible, for it is the great promoter of monopoly. They ought further to recollect, that it is only the high prices which will be kept secret, no purchaser of Cotton will hesitate to tell a planter or factor that he has bought as good Cotton at a lower price than the parcel he is in treaty for. The factor ought in return to be able to say, that he has sold at the same, or even higher, if he can do so with truth. If the Sea-Island Cotton-planters will ask some of their friends, the Rice-planters, how Rice secrets, can be turned to the disadvantage of the planter, it may warn them in time to guard against Cotton secrets, at least so far as turning either of these valuable crops into money is concerned.

J. G.

"It cannot be denied, that since the custom of keeping secret the prices of a few lots of Sea-Island Cotton first rose amongst us, that along with it a spirit of jealously has been nourished, both among the factors and planters; and this has done incalculable injury to all concerned, if we except the buyers of Cotton, by whom every measure has been used tending to foster this spirit, insomuch that, whereas the prices given for only a few of the best lots of Cotton were formerly kept secret, it is now usual for them to enjoin secrecy on sellers, for almost every lot brought into the market; and it is almost impossible for one factor to obtain from another the price at which he sells any lot of Cotton.

Assured that this is a correct statement of things, it behoves us to look to the consequences; and I think we shall soon be convinced that we have suffered ourselves to be used as tools against each other. And I do not believe there is to be found in any other community, a body of men, with similar interest, permitting themselves to be used INDIVIDUALLY by their natural opponents, to embarrass, as a BODY, those who should be their natural friends. My object is to prove this to be the case with us, and suggest the means

which I think will remedy it.

Let us endeavour to discover who benefits by this system. Is it the planter? This cannot be the case, since every man is obliged to sell his Cotton for what the merchant tells him is its value, he has no means of knowing it himself, for to complete this system, he cannot get samples of his neighbour's crops to compare with; and if he does obtain samples, he knows not at what it sells. But I assert on the contrary, that from the gentlemen who first sanctioned this system, down to those who now uphold it, they have one and

all suffered by it.

A first got a high price for his Cotton, and consented to keep that price a secret; and the reason of enjoining this secrecy was, that the buyer was apprehensive lest the same price should be asked for other lots equally fine, as was soon the case. After a time, B and C thought their Cotton equally fine, and asked a higher price also. The buyer hoping to use them in depressing the price of A's Cotton, after a while gives them also a high secret price, but being beginners, they are at first content with getting 10 or 15 cents more than usual, although as many cents below the real value of their Cotton.

And now A begins to pay for consenting to a secret price at first. The buyer has excited competition, and now tells him, "B and C raise fine Cotton, and I can get it much lower than I have been paying you." Here every one will perceive that A's own example has injured him, for if the price of his Cotton had not been secret, B and C would have known what to ask for theirs; but in this emergency he must take the word of the buyer for it, and lest he should lose the sale of his Cotton, accept what is offered him, and which, perhaps, is 10 cents less than B and C got. Had there been no secret price in the first instance, each lot of Cotton would Thus it is at first the inhave have sold at its real value. terest of the buyer to give a high secret price; it acts as a lure to others, and afterwards enables him, the more the system is extended, to make the better bargains. It is indeed an ignus fatuus.

B and C are now at the top of the ladder, and soon feel the effects of the system in like manner with A, and so on with every one who permits himself to be used as an instru-

ment in perfecting this system.

That these are not mere suppositions, but facts, I appeal to all of those planters whose Cotton has been successively

the highest in repute.

But I will further illustrate this matter by a circumstance which occurred to my own knowledge. D got the highest price for his Cotton, but that secret, at last E began to raise Cotton as fine, and showed the samples to the same buyer, who used to purchase D's Cotton: D asked a higher price than ever, but the buyer, when he saw the sample of E's Cotton, refused to give the price asked by D, certain that E, who did not know the value of his, would take much less. In the mean time-D sold his Cotton to another buyer, at the price asked, but secret; and in a few days, E's Cotton was sold at 40 cents below its value. Why? Because the price of D's Cotton was kept secret, and E was thus deprived of the means of properly valuing his Cotton. it would appear that only E was injured by this. By no means, the injury went much farther. The buyer of E's Cotton writes to the manufacturer, (for whom, as it happened, both lots were purchased,) saying, that it was reported that such a price was given for D's Cotton, but he had obtained E's for much less, although nearly equal in quality;

and the next year, the manufacturer, thinking that his other agent had given too much for D's Cotton, and expecting to buy both at the price of E's the preceding year, sent orders to that effect. The price of the article being thus much reduced, and D knowing how small a price E got the year before, it because a much easier matter for the buyer to treat him as he had done A, B and C, before him. Will not every planter now feel satisfied that it is to his interest to discard all jealous feelings on this score, and unite in efforts to put down a system which is every day imperceptibly taking money from his purse? To their interest, and their interest alone is this appeal made.

But what does the factor gain? I answer: No factor ever increased his business by keeping secret the prices at which he sells; for it is the knowledge of those prices which attracts persons. If he gets a high price for a lot of Cotton, he naturally wishes it known, for if it does not draw more business to him, it will keep that which he has already; if he sells generally at a lower rate than others, and is as good a judge of Cotton, it must be because he does not know its market value, and this can only be where secret prices are in

fashion.

But Sea-Island factors will be still more convinced that secret prices are not requisite to effect advantageous sales, when they recollect, that they are alone in the practice of I believe Rice-factors scarcely ever hesitate at telling the price, at which a lot of Rice sells, and the Northern merchants have no secrets in their business, as far as selling is concerned. What is the consequence? Take the "weekly report of prices" in the city papers, and it will be found on inquiry and comparison, that the quotations of every article are correct and considered of authority, except that of Long Staple Cotton, and it is notorious that neither buyer or seller ever thinks of looking for the price of this article in these The price inserted being generally that of the lowest qualities, and frequently guessed at by the editor, from the lack of any thing like definite information to be had from either factor or buyer.

Is there not great want of concert manifested here, and will any factor undertake to prove, that in the end his business is benefited, and justice is done to all who employ

him?

I am aware of what some large factors have advanced, viz: "that they have a sufficient variety of qualities in their own hands, to be enabled to make good sales," and that "they are clear for every man paddling his own canoe," as was said by one. Putting out of view entirely the strict adherence to the selfish maxim, "You sink, I swim," expressed in the latter part of the above argument, let me ask in relation to the former: Have these gentlemen found that this great command of the market has prevented a customer from deserting every now and then to some brother in the trade, who by a fortunate or skilful sale, which has become known, has been raised into repute? If the answer is No. then they will agree with me, that the matter could not have been worse if all their own sales were public; for probably the knowledge of some of these would have retained these very customers who have wandered, thinking that higher prices were to be obtained elsewhere. The large factor should also remember that however great his custom is, and the power which it gives him, yet still the business is divided. No man has a fourth of the Sea-Island custom, or more than that, and he may certainly benefit by the information which he may derive from the sale of the remaining three-fourths, and none will impart this information to him, unless he returns the favour.

In short, it will be found, that far from doing justice to those who employ us, and benefiting ourselves, we have been actuated by selfish feelings, and urged into the adoption of a system, by the specious reasoning and arbitrary requirement of those whom we should have distrusted, because opposed in interest to us.

The buyers have done all in their power to cherish the jealousy existing, particularly among the factors, and this system of secret prices has been their most powerful agent.

But for all our complacency towards them, and distrust of each other, let us hear what they think of us. A buyer said in the hearing of a gentleman: "I do not know a set of men with so little of liberality towards each other, and who stand so much in their own light, as the factors of Sea-Island Cotton; like a rope of sand, they possess no stability as a body, and from their jealousy of each other, one would suppose they were each engaged in a different trade."

There is but one other party in this business, the buyer, and in him we have at last found the one who benefits by It is asked how? It prevents the establishment of a market price, without which no trade can be carried on profitably to the vender. The buyer looks at a lot of Cotton, it suits his order, or, he knows its value across the Atlantic. The factor does not even know its value at the place of sale, for his neighbour has just sold in the secret manner, in which he is about to sell. The buyer says: I will give you 35 cents, but the price must be secret. Although, perhaps, other lots of the same quality may have brought 10 cents more the same day, yet as brother factors will givr him no information, should be seek it, he must take it foe granted that this is its full value, and supposes that the buyer would not require secrecy if it was not a high price. In short, he must sell entirely in the dark, and at a venture, being denied the benefits of a market price, and a comparison with the quality of other Cottons.

But again: It destroys all competition both in selling and buying, and gives to the buyer inaividually a monopoly. the price is kept secret, one factor cannot benefit by the price given to another, and then with an agreement on the part of the buyers, not to interfere with the respective lots, all competition being destroyed, what resource has the factor but to sell on the terms of the buyer? That this combination among the buyers does exist, will be doubted by no one who has had an opportunity of seeing how business was conducted the last winter. A buyer, when a lot of Cotton was offered him during the last season, said he liked it very much, and would give the price asked, provided it was not part of such a lot, as he could not touch that. sured that it was not, and bought it. It is said that he afterwards had a dispute with the buyer of the other lot; the latter insisting that they were both included in his share — A gentlemen offered his Cotton to a buyer, who said he would give such a price, and that no more could be got for it, as there was but one other buyer who could touch it!

If I have thus far succeeded in putting this system in its proper light, and have shown that no one but the buyer derives any benefit from it, let me ask, will factors and planters continue to permit it, after what has been said? Are they not perfectly satisfied that nothing but a negligent blind-

ness to the consequences of it, could in the first instance have induced them to comply with a demand as arbitrary in the buyer, and profitable to him; as it is unsanctioned by all fair principles of trade, and discreditable to the judgment of those who may approve it? Nor would I be understood as censuring the buyers of Cotton for enforcing this system to as great an extent as possible. On the score of expediency, I think them perfectly justified in taking advantage of every factor and planter, who after seeing and experiencing the effects of it, will still allow them to do so.

It remains to consider the measures which should be used to counteract this system, and to factors are the following

suggestions chiefly addressed.

It appears to me that the evil is easily corrected; let us do what is done in every community when danger threatens from without; let us unite for our mutual defence. Is it possible ten or a dozen individuals can cross the Atlantic and dictate terms of trade to a community like ours, when by a little concert among ourselves we might counteract all their schemes? Let us consider ourselves as individuals of a community, actuated by good feelings towards each other, and impelled by interest to act together, and always to distrust those whose interest is diametrically opposed to ours.

Do you think that a merchant, if he likes a lot of Cotton, will not buy it because he knows the price will be public? He will not stand so much in his own light. And dare he pass it by on that account, if especially ordered by a manufacturer? Five per cent is not so easily made in these times. We are sellers, they are buyers, if they cannot get our Cotton on their own terms, they must take it on ours, if we are They cannot do without it, and will not not unreasonable. do without it, at its real value, and that is all we ask. True, we must have the assistance of the planters to effect this, but with us lies the responsibility; if we do not make good sales, we lose our business-at least if we do not attempt something, the fault is with us; and I will venture to say, that there are but few planters who would wish to continue this system, after all its disadvantages are fully laid before them.

Before we do any thing else, we must resolve to be no more each others enemies; all jealous feelings must be laid

aside, let him who can make the best sale reap the benefit, and let the only effect on others be, to excite the more exertion, for the interest of those who employ us. Why should A be jealous of B, and avoid him, because a planter has taken his custom from the former and given it to the latter. If A is not aware of any dishonourable means being used to effect this, surely B is not to blame, even should there not have been cause for the change; and if there has been cause for this change, then A, instead of venting his dissatisfaction on B, ought to be more careful of his own interest in future, and recollect that every one starts fairly in the race, and he who is beaten for want of skill or exertion, deserves his fate. If we can bring ourselves to this state of feeling, let us call a meeting of factors and resolve what shall be done; let us bind ourselves to sell no lot of Cotton at a secret price, unless the owner insists on it; show without hesitation to each other, samples of any lot of Cotton in our charge; divide ourselves into weekly committees, to report the business of the week, and correct quotations; appoint a committee to draw up a circular for distribution among the planters, setting forth the injury done to them and us by this system, and requesting their co-operation in any measures which may be adopted for putting it down; and lastly, agree upon any other measures which the majority may think requisite.

But whatever is done must not be partial, as regards either men or measures, all must unite for the common good, and certain am I, that we shall ultimately find our individual profit in this course. It is after long and close consideration of this matter, that the writer is convinced of its importance, and he thinks many now coincide with him in the above views. The experience which he has had, is sufficient, in his own opinion, to bear him out in what he has said. Circumstances threw him into a situation which better enabled him to see both sides of the question, than most persons; and the above is the result. The facts stated he is pledged for; the inferences are matter of opinion—he wishes them all examined carefully, and the result, he trusts, will be such as he is anxious for—the benefit of Sea-Island planters.—

A FACTOR.

[&]quot; We think this measure would be attended with the very best consequences to the planting interest.

J. G.

ART. II.—On Rust in Cotton; by THOMAS SPALDING, Esq. by A SUBSCRIBER, and ANOTHER CORRESPONDENT.

OBSERVATIONS BY THE EDITOR.

That many of us planters have been gradually letting down our lands to the lowest state of impoverishment, may be known by the incessant lamentations throughout the country, by the state of the times, bad prices, and other general complaints, as well as by other strong facts, shewing that much distress is every where felt.

This distress in our opinion, proceeds more from the low state of cultivation, than from the low prices of our staples. For if these prices are compared with those of most of our consumable articles, they will be found to bear a fairer relative proportion to what they were formerly, than is generally imagined. On the other hand, if the value of the crops we raise, is compared with the value of the crops raised by other countries, and other people in various parts of the world, and if the prices, also, of our produce, are compared with what other nations get for theirs, it will be seen that we enjoy advantages which seldom fall to the lot of human beings. To illustrate this, it was our intention to have laid before our readers comparative tables of the prices of produce and of the necessaries of life, at different periods up to the present day; but our limits, and the termination of the year, forbid it; although these might have reconciled us somewhat to the state of our markets, and induced us to turn our minds altogether to increasing the fertility of our fields, by way of rectifying the evil of the times.

That much of our land has sunk down to a deplorable state of impoverishment, we think then must be allowed.—
The answers to the inquiries into the causes of rust, show this fact, and also that lands, even of good quality, if cropt incessantly even with Cotton, must become exhausted. As they gradually sink into this state, the crop falls off; by degrees it grows worse and worse, until, at last, the worn-out fields produce rust; the soil being too poor to bring the whole fruit to maturity, perfects a small part only, and gives up the rest to decay; refusing to give a return to the toil of the improvident owner.*

• When we wrote the note, (p. 438,) we were under the impression that rust was occasioned by injury to the tap-root of the Cotton, from a heavy VOL. 11.—NO. 12.

Many of our plantations are in the state described by Middleton in his Agriculture of Middlesex, where, recommending an admirable system of husbandry for that county, he instances the state of Anglesea as a warning against bad management. "The Anglesea method of cropping land," says he, "naturally extremely fertile with Wheat and Barley alternately, brought on the necessity of giving up Wheat; Barley and Oats were next grown alternately, which in a short time sickened the land of Barley. Then, as a last resource, Oats after Oats, 'till it would not bear them. This county has been in general thus left to keep some young cattle from starving; and its inhabitants are as impoverished as their lands?"—View of the Agriculture of Middlesex: page 157.

That much land in the Southern States is in this situation, without the owners suspecting it!—that incessant Cotton and Corn crops have ruined our fields, requires no ghost to tell; the remedy in many cases will appear from the following letters; and in their perusal, and those we published, pages 438 and 488, we are convinced our readers will see that the causes of rust are to be looked for in the totally exhausted state of those fields where it appears.

That the causes are well known to some planters, or that they have at least found out the mode of curing rust, will be seen also by the following letter from our intelligent Correspondent, "A Subscriber," and by referring to the observations of "Another Cotton-planter," in our last number. That restoring great fertility to land will always cure it, and that exhausted land will always produce it, appears from

listing of broom grass in old fields, thus producing worms and decay. A more diligent inquiry has satisfied us our opinion was incorrect. For although the tap-root is thus injured, and the Cotton greatly hurt in its growth, it does not account for the rust, with all its symptoms. The following passage from Smith's Botany, we have noted as applicable to the case of rust.

Smith's Botany, we have noted as applicable to the case of rust.

"In a poor soil or unfavourable climate, a bunch or spike which should naturally consist of a considerable number of flowers, bears, perhaps, not half so many. Its upper part very early withers, the vital principle ceases to act at the point, beyond which it could not act with effect, and all its energy is directed to prifect what lies within the compass of its resources. This is evident in the Sweet Pea of our gardens, [he speaks of his own country. England.] a native of a very hot climate, at the summits of whose flower-stalks are generally found the rudiments of one or more flowers, not attempted to be perfected. So also the first Barley sown on the sandy heaths of Norfolk, and indeed too many, a following crop bears very few grains in an ear. For the same meagre supply of nourishment, bestowed equally on a numerous spike of blossoms, would infallibly starve them all," &c. Let our readers compare this with "A Subscriber's" remarks.

the united testimony of all whose opinions we have been able to collect, verbally, as well as in writing.

If, then, worn-out lands do then always produce rust, the partial failure of crops, imputed so often to bad seasons, or bad management, in mere tending of the crop, may induce our planters to stop in time, before the rust stops them, and introduce a regular rotation of crops, and regular manuring to sustain the fertility of the soil. In new land this is particularly necessary, to save loss in the end. If, however, they do not plant new land, let them bend all their attention and means to fertilizing their old lands by cattle manure, Cotton-seed, and salt or fresh-water mud. The Edisto and John's-Island planters are more successful than any others, and there every man manures as highly as he can. By Mr. Spalding's letter it will be seen that heavy listings are not to be depended on for a crop, even on fields long laid by.

The first letter on rust we shall give, is in extracts only. It is from an intelligent gentlemen, who, although not an old planter, shows great judgment and skill in his mode of preparing land, which he describes to us fully; and in his agricultural remarks generally, but which we do not repeat. He says:

"The open land had been cleared at least forty years, but had not been planted for twelve or fifteen years before I took possession, and it was covered with sapplings, briars, and a most luxuriant growth of broom grass. My first year's operations brought a good crop of Corn, and served to destroy the grass. The next year the land was prepared for Cotton. The old field which had not been planted was also prepared with great care, and yet the result was a crop blasted by rust. This year I planted no old field, excepting a few acres adjoining a piece of new ground, and included merely to square the field. This was in Corn last year, and produced a good crop. The crop of Cotton on it is destroyed by the rust, while the new land is unaffected. The difference between the new and old land is perceptible to the very hill."

The next letter we have before us, is that of Mr. Spalding, in reply to A. B. page 493, and the letter of "A Subscriber," both of which are truly interesting and require no comments from us.

J. G.

"To the EDITOR of the SOUTHERN AGRICULTURIST.

Dear Sir,—I received the copy of A. B's. letter, sent to me by post, which enables me to reply in time for your December number, although I have not yet received that in which it appears.

In recurring to the subject of rust, in compliance with the wish of your Correspondent, I feel no little difficulty. The experience of my life has discouraged many things like theory, that is not reached, or is not tested by experiment. That we are surrounded by indications, and, that wisdom admonishes us to lay hold of those indications as guides in our researches after knowledge, is most true. Nay more, we have some reason to believe, that if the mind would abstract itself from the wants and the passions which oppress it, it might discover that it held within itself the first link of that multitudinous chain which unites and binds together all knowledge that is necessary for man. But it is otherwise with us, our vision is obscured; our researches, therefore, must be cautious, and our conclusions must be slow.

Thirty years ago I purchased a small Island of upland, near Darien, from Mr. William McLeod, of Charleston.—
This Island was about one half cleared, and the other half in wood. It had been twice planted by transient persons, within my own knowledge, and had given large crops of Cotton. When I took possession, there was no stock of any kind upon the Island, and the cleared land was covered very thick with a luxuriant growth of soft weeds. My Overseer was a man of experience and reputation in his line, and well acquainted with the Island.

We anticipated great results, from carefully bedding in this mass of vegetable matter. In all points the land was well cultivated, and in the early part of the season promised much, but about the beginning of August the rust made its appearance, and spread over the field of an hundred acres, leaving nothing but a small point of light, sandy land uninfected. I was young, my expectations had been great, and my disappointment was still greater. I had been prepared for Caterpillar, but here was something worse than Caterpillar, a new enemy, that came like a thief in the night; that smote us like pestilence in the dark, not knowing how or from whence.

But I had learned in other countries, that crude and undigested vegetable manures, in too great quantities, gave to Wheat crops, blight or mildew, and I saw there was great analogy between rust upon Cotton, and mildew upon Wheat.

Could I fail to attribute the rusting of my Cotton, upon lands that had always before been productive, to the bedding in this abundant crop of weeds? I could not, and I did not; and here was the indication that directed my researches into the cause of rust in Cotton.

But to proceed with this field; (for in truth it has been a chart to my inquiries,) the harricane of 1804, took place two years afterwards, flooding this island several feet deep, and leaving upon it great masses of marsh wreck. The late Col. Sheubrick had recommended in the Charleston papers, marsh wreck as a manure; it would assist to retain the salt within the soil. The leisure of a lost crop, gave time to spread the drifted sedge over the land—this was done, and the land again planted, but again my Cotton rusted. The lands were low, and I laid off ditches at every twenty-five feet, sinking them so deep as to bring up enough of the sub-soil, which was a kindly yellow sandy loam, as to strew over the surface. A portion of the field was still subject to rust. Finally and lastly, I have expended twenty-four days work per acre, in laying on marsh mud; this, with burning off every alternate spring its vegetable coat, and then ridging very high, has in some degree accomplished my end.

You will understand that the part of this island, which I cleared myself, in all points similar, and adjoining, has been severally cropped, for many years, without exhibiting extraordinary disposition to rust. Here, it will be obvious, it was not asmosphere that produced the disease; both fields were under the same atmospheric influence; it was not exhaustion, for the latter field has produced more crops of Cotton than the former, without the aid of manure.-These experiments led me to believe, what other circumstances had taught me to suspect, that the fermentation and digestion of this vegetable matter, under the surface of a loose and porous soil, had quickened into life and being, one of those insect broods, which did not require the solar miscroscope to instruct us fill all earth, all air, all water-living upon all that live. Yet multitudinous as they may be, judging from the phenomenon,

each would seem to have its subject, its intention, and its At the time I drew the conclusion, that the evil from which I suffered was animal and not vegetable, I was aware that Sir Joseph Banks had discovered a multitude of parasitic plants, upon mildewed Wheat, but for myself, I did most humbly conceive, that Sir Joseph Banks had paused one step too low upon the ladder of ascent, and that the parasitic plants he discovered, owed their origin to some injury the Wheat had previously sustained, from a more obscure and undiscovered enemy; they were effects, not causes. Time, with every returning year, is spreading the evil of rust, and our best judgments, with our best experience, must be taxed to find remedies to arrest or to remove it. as my experience goes, stiff clay soils are not subject to it.— Is it because the vegetable matter is generally burned off these lands? High, light sandy lands, in my experience, are not much subject to rust. Is it because such lands produce grass rather than more rough and juicy weeds, and are more capable of taking up any redundancy of vegetable matter that may be placed npon them?

The lands which we once thought the best, Oak lands, of moderate elevation, with oyster shells mingled with the soil, have become the most doubtful and treacherous.

But there is no question that the system of culture has materially changed within a few years; our anxiety to preserve our lands, and the high authority of Col. Taylor, in his Arator, has induced many to adopt his system. Cattle have been excluded, fire has been prevented; yet that system may have been good for Virginia, and Corn culture, and bad for Georgia and Carolina, with a Cotton culture. Besides, Virginia had been subjected for a century to a Tobacco culture, in which every thing is taken off; the soil might, therefore, really be in want of that portion of vegetable matter essential to fertility. In any communication of mine, I feel great reluctance in venturing to differ with Col. Taylor or Judge Peters; yet I am misinformed if the practice of repeating Gypsum, and turning in Clover crops, has not in the end, greatly impaired the Wheat crops in the vicinity of Philadelphia. But, be this true or false, so diversified are the soils of different countries, so many and varient are the enemies that vegetables, like animals, are subject to, that really no rules can be laid down for all. I have, therefore, ventured to recommend burning, rather than burying vegetable substances; but the experience of my life has forced me to believe that it is the safer course. Arthur Young has said, there can be no real improvement of land without sheep; and I should certainly rather keep down my fields, with cattle and sheep, than return their product in a crude

state again to the soil.

But I will proceed to give a short commentary upon that sentence of my letter to which your Correspondent alludes. I ridge high, for the purpose of bringing up the subsoil, which, if poor, is pure and free from contamination.-The Cotton will have with this deep working, after the field has been two years free from Cotton, a greater probability of growing up, if not large, at least healthy. Corn crop follows, not alone for its own value, but because its many long and rambling roots pierce and break up all undigested collections of manure; but again, because it leaves the field well seeded with grass, in the last year of the series. For myself, I have never seen a crop of Cotton fail after an abundant growth of crop grass burned carefully off the land, before ridging for Cotton. Nor is this field so treated more difficult to keep clean than if it had been covered with weeds. The two years in Corn and in grass, has prepared the soil for a change of crop; for a leguminous plant, for Cotton, for poke, or some other of this character. I burn, rather than bed in rough vegetable substances, lest these should be generated or multiplied, what I consider a vital evil, and which I have found afterwards very difficult to remove. let, however, cattle run upon my fields, and if I had sheep, (or rather if they would live with me,) I would multiply them to the farthest point, believing they give more than they take away, and, that in the operation they transform what would be injurious, to what is useful and valuable.

I have found benefit in marsh mud; it consolidates the land, and promotes blowing in the spring. I know no benefit in any manure but in that, and in well-decayed, and well-trodden manure from my cow-pens, after having lain

two years in mass.

I put no seed in the ground until it has actually germinated in salt or fresh water.

And, lastly, I make my high ridges the better to mix the soils, and so to cover all indiginous seeds, as to permit my Cotton to come up and to precede them in its growth, which it is the better able to do, because I plant late.

I feel, sir, that in this letter I have not distinctly developed any theory; for I am sensible we are treading upon the confines of a world of disputation, and that your paper should be no field of disputation.

I have ventured elsewhere to say, what in the full conviction of my mind, I believe, that all the diseases to which the animal or vegetable world is subject, are animal; phenomena which I have observed have forced me to this conclusion. Phenomena observed and recorded, upon other subjects, and upon other occasions, by many enlightened men, would lead to the same conclusion. What then do I adduce from this, applicable to our case? Why, that in one system of agriculture, we should guard, as far as possible, against every thing that might extend or multiply this evil: we should search, in experience, for every means that could arrest or put it down. And when each shall have finished the gleanings of his experience, we may hang them up in your paper; and light, order and system may arise out of the collection.

I remain, dear sir, your's with esteem,

THOMAS SPALDING.

"October 16, 1829.

"To the EDITOR of the SOUTHERN AGRICULTURIST.

Sir,—Agreeably to your request you will herewith receive a few ideas on the subject of rust in Cotton.

Some years since I purchased a tract of land, worn-out. The Cotton, the first and second years, rusted in spots in every section of the field. To remove this defect, animal and Cotton-seed manures were freely applied, and as fast as a few carts would enable me, these spots were supplied with mud. The disease ceased, and has not since occurred; and the same system is successfully continued whenever these fields are planted. Rust generally appears about the great fructifying and maturing months, July and August, and appears to be caused by a want of that property in the soil which is so much required at the period of bringing all fruit The same spots betray the same effects on to maturity. Peas, Corn, &c. and as soon as the first fruit on the stalk commences ripening, the plant loses its vigour, the leaves turn yellow, dry up, and with Peas and Cotton, a bare stalk is soon exposed, the young pods sharing the fate of the leaves; with Cotton, the field assumes the same appearance which the Caterpillars now cause it to do—that is, a few pods opening below, bare of leaves, and nothing promising above. Plants are liable to rust or premature decay, in any description of exhausted soil—rest will not renovate it sufficiently to produce healthy Cotton. I have seen it in the first year's planting, of worn-out land, recently cleared of Pine saplings, and am under the impression that no other remedy is at hand but stimulating manures, and if procurable, fresh soil, such as fresh or salt-mud should be added. Pine-trash—this most stimulating vegetable manure, has (alone) had but little effect in removing rust with me.

Respectfully, your's,

A SUBSCRIBER.

ART. III.—On Marsh Mud; by WHITEMARSH B. SEA-BROOK, Esq. in reply to A GEORGIA-PLANTER.

Edisto-Island, October 11, 1829.

"To the EDITOR of the SOUTHERN AGRICULTURIST.

vol. 11.-No. 12.

Dear Sir,—I am happy to be able to answer the Queries of "A Georgia-planter." Of dry mud, a cart-load is eight level bushels; of dry turf mud, from twelve to fifteen bushels, and if wet or green mud, about five bushels.

In gathering mud, the negroes are invariably tasked, and in this way: From a stake driven into the earth as the centre, a circle of the diameter of twelve feet is described. Two fellows with a hand-barrow, fill this space conically to the height of six feet, where the distance does not exceed twenty or twenty-five yards. Each heap, if permitted to dry, will be found to contain about 160 bushels. Our method of getting out this manure is very simple, and yet highly efficacious. Two, three, or more planks, about one and a quarter inch thick, are laid in succession from the high land to the mud bank. On this, as the pathway for one hand-barrow, the mud is carried. Occasionally a little sand is thrown on

the planks. When all the best mud* within reach of the hoe from the pathways has been dug, the planks are removed to some other place.

Allow me now, sir, briefly to notice a few of your remarks. You are of opinion that "on pure" (the best) "mud, it is impossible for either cart, horse, or driver to be supported," and that "the best mud is soapy to the feel, soft and easily managed with the hoe." Such is not our experience. The mud banks, divested of vegetation, of a black or blue colour, and of a clayey texture, and the surface of which is sufficiently firm to resist the pressure of a loaded wagon, we consider the most valuable. As the soil from such banks is, in general, highly tenacious, it is not easily dislodged from the hoe, and in pulverizing it, some difficulty is experienced. Soft clay mud may be readily spread, but the very operation precludes the possibility, at least for a considerable time, of its intermixture with the earth. Here I would incidentally remark, that among the benefits derivable from the use of mud in a dry and pulverized state, is the impracticability of the tap-root of Cotton thereby sustaining any injury. This is an important consideration, and, I apprehend, as I have had occasion in a previous communication to inform you, that the main reason why a mudded field assumes an unproductive appearance in the infancy of the crop, is, that a lump or layer of mud is impenetrable to the roots of In their efforts to accomplish this purpose, they receive a wound, which must, in some measure, impair the nutritive functions of the plant.

You ask: "Why shall the use of marsh mud be prohibited on stiff lands?" If, by "stiff," you mean clayey, I answer, because the experience of several years, as proved by the experiments of many individuals has shown its comparative inefficacy. The value of mud, we are satisfied, displays itself relatively as the soil increases in lightness and aridity. It was on this fact personally known to be true, that I ventured to advance the opinion, that one prominent advantage in the use of salt clay mud on sandy lands, is the alteration it produces in the constitution of the soil. On one of my plantations, I have frequently, and by the application of various quantities, endeavoured to ascertain the value of marsh loam, on a soil strictly argillaceous. There, too, I have an abundant store of the very kind so highly esteemed

^{*} That which lies not deeper than three feet.

by you. The result of my trials has been uniformly unsuccessful. It is true that the Cotton was always of a pale yellow hue, of rather a dwarfish height, and that it matured rapidly, but these are the common indications of the presence of salt. Otherwise, the experiment fields have always been as inferior as where no manure was applied.

After these desultory observations, permit me to conclude with the hope, that the number and zeal of your Correspondents may be commensurate with your spirited and patriotic efforts in the great cause of agriculture and rural economy.

Respectfully your's, WHITEMARSH B. SEABROOK.

OBSERVATIONS BY THE EDITOR.

That soft mud is made use of extensively, is known to most Sea-Island Cotton-planters; it is particularly mentioned in the answer to Mr. Seabrook's queries, vol. I. by Mr. Vanderhorst and Mr. Mathewes. As far back as 1797, it was used by the late Gen. Vanderhorst, adjoinging our own place, on a stiff soil, and it is now used to our knowledge, by planters on the same kind of land, to great advantage.

We are authorized by a highly respectable John's-Island planter to say, that having spread the mud on the land, in order to ascertain the effect, he pulled up some of his Cotton-plants, and found the tap-root not only had passed through the mud, but the plant was so firmly attached to it by the lateral roots, as to bring up the lumps with them.

J. G.

ART. IV.—On Marsh Mud; by AN EXOTIC, in reply to A GEORGIA-PLANTER.

OBSERVATION" BY THE EDITOR.

This well-written paper deserves the attention of every young Sea-Island Cotton-planter, and some even older ones may read it to advantage. The superior care and good treatment working creatures receive from women carters, we know by experience on our own plantation, and by obser-

vation in our neighbourhood, where we have seen women driving, and the mules they had in charge, well kept, and admirably broken in. The observation about confidential servants, we hope will reach other Exotics—some of whom we think ought to reflect on it.

J. G.

"To the EDITOR of the SOUTHERN AGRICULTURIST.

Sir,—Having some experience in the application of mud, and its advantages as a manure, I beg leave to tender it to "A Georgia-planter," and such in Carolina to whom it may be acceptable. I therefore reply to the queries of the former in the order he has stated them.

1. A cart load of mud is generally understood to be as much as two healthy and well-conditioned oxen carry out without much fatigue or exertion.

2. Each cart carries out, in proportion to the distance, the following loads per day, viz: If the distance is from one to four tasks, from thirty to forty loads; if from four to eight tasks, from twenty-five to thirty loads; if from eight to ten tasks, from fifteen to twenty-five loads, and so on.—Much depends upon the observation of the planter, to ascertain the skill of the drivers; the capacity of the animals at work; advantages of the ground for travelling, and the facilities of loading or getting from the marsh to the high land.

3. It is best to apply mud when green, if the spring and summer are dry. If these seasons are wet, dry mud answers best; and this makes it in some measure a lottery.

4. It is best to top luxuriant Cotton about the 15th of September, and in about a fortnight after, clean off every sprout and useless arm below. If the latter is not done, the former will be a disadvantage.

I have endeavoured, as far as I know, to reply to the queries, and will now offer my method, which has been pursued successfully, upon the strictest principles of that free economy which regards not the expense of a penny for the production of a guinea. The selection of a spot for mud, is governed by its richness and contiguity to the spot to be manured. A semi-circular road is then made, by laying on the marsh rails, placed close to each other, on which the carts drive on at one end empty, and off at the other loaded, without turning or interruption to each other. If the mud is soft, rails are placed under each end, and the centre of

the rails that form the road, which answers sufficiently to prevent the road from sinking as sleepers do to support a bridge. If the upper rails are in danger of being taken off by the tide, they are secured by laying across each end of the upper rails, a single string of rails secured by stakes driven down cross ways. You are now on the marsh mud as firm as on the high land. Your mud is dug on each side of this road, until it is inconvenient, or the quantity fails .-The road is then removed in the evening to a contiguous or more convenient spot, and so on till your field is finished. For 150 acres, twelve carts should be daily at work, commencing on the first day of January, which will give time enough for the 1st of February, making allowance for rainy weather and high tides, which must always interfere with Forty-eight head at least of active, small-sized, large and short-bodied oxen, should be under orders for the twelve carts, whilst twenty-four head are at work, twenty-four head for change should be stuffing themselves in the pen with well cured Potato-vines, Moss, Rice-straw, Peahaulms, Blades, Hay, Oat-straw, and no more fresh Cotton-seed than they will consume in twenty-four hours; the latter to be removed when fresh is supplied. All these articles must be of the growth of the plantation. They, or it, will not thrive upon imported food, for these animals are more patriotic than their masters, generally speaking .-They should be watered at least three times a day. carts are to be made as follows: Two wheels to be purchased for each cart; the wheels* about three feet in diameter, similar to dray wheels. The jobbing Carpenter to attach a common wagon tongue to the axletree, and a tray, about five feet square, made like a batten-door, edged on the front and two sides by pieces, three inches wide by two inches high—is nailed on with wooden nails, (these do not rust and break off in the midst of business,) these pieces are to prevent the mud or manure from slipping off from the bottom, and answer the purpose of a side—the advantage of which over the sides of the common cart must at once be apparent, where the labour of elevating mud is increased two-fold every inch higher it is raised by the spademan. These trays are placed on the axletree and secured by titling irons,

^{*} These wheels are purchased in Charleston, made substantially, and of the best materials, for \$18 the pair. Imported casts, which are weless for mudding, cost \$45 each.

one set on each side, one bolt going through the axletree, the other through the bottom and edge, or side piece, midway of the tray. The mud is then heaped on in a conical shape, and the driver is soon accustomed to the quantity the animals can travel with, which is the best measurement or explanation of what a cart-load ought to be.

You will perceive that I do not write about horses or mules, as no lowland Southern planter who means to succeed in ten years in his business, will dream of employing such costly animals (in purchase and feed,) when he can use oxen,* which require no cost or attention to raise to the yoke, but simply to keep them from the confidential servants' midnight cook-pot.

AN EXOTIC.

ART. V— On the Grape Vine; communicated by N. HER-BEMONT, Esq.

"Columbia, S. C. March 19, 1829.

"To the Editor of the Southern Agriculturist.

Dear Sir,—The following is a copy of a letter to a gentleman in Cincinnati, Ohio, in answer to some queries.—They are such as may be interesting to many of your subscribers. If you think so, you may insert it whenever it is convenient.

I am glad to see that your opinion is, that Sugar is hereafter to be one of the most important staples of our State. I doubt, however, its ever being the case in the middle and upper parts of the State, and I wish this idea may not induce you to think the less of Wine and of all belonging to it, as I fear it is the case with our Agricultural Societies. The misfortune is, that the vine is several years after planting without returning any profit, and we do not seem at all disposed to do any thing for posterity, us it has never done any thing for us. If we ever cultivate the vine extensively, we

^{*} Boys or wenches drive the animals to the best advantage. Patient and ebedient, oxen will perform any duty, under kind treatment; but the cruelty which they receive from fellows, makes them stubborn, and they are soon rendered useless by losing their eyes, and by severe bruises.

must have corks, and we have thousands of acres fit to produce the Cork Tree, and scarcely any thing else. But who will get and plant them? Our Societies cannot do it; their funds are much too small to do all things that are useful, and our government thinks it ought not to do any thing for the good of the country!!! This doctrine may do very well, and probably is good, though I cannot see how it is so.

Respectfully your's,

N. HERBEMONT.

"Cincinnati, Ohio, March 12th, 1829.

Dear Sir,-I have three days since received your letter of the 20th ult. by which I am happy to learn that the vine cuttings which I sent you, had arrived safe and sound. I am much obliged to you for your intention of sending a few of your particular kinds; but unless they are such as I cannot get in the Atlantic cities, it is not worth while to send them by mail; particularly because such cuttings as can be sent in this manner are necessarily very small ones. I beg you will not send any, unless it be some of your super-excellent natives, and then I should like to have them fit for It is an error to suppose the graft never joins to the root or stock; for, if it were so, how could they grow in the first summer with such extraordinary luxuriance, and very often bear fruit then in the highest perfection? I have had them frequently to grow in four months so as to cover a bower seven feet high, and about ten feet square. It is true that grafts, particularly the white grafted on the black, are apt to die in eight or ten years, when apparently in full vigour; but even then I have always observed the insertion perfectly joined; and notwithstanding this disadvantage of their frequently dying so young, it is a great advantage to have so soon a number of fine cuttings to propagate my rare species with. It is also very convenient to lay one or more of the low branches, so as to have the next year after fine vigorous rooted plants, perfectly independent of the stock on which it was grafted, and I have even made layers of the lower shoots the first summer, and taken them up the very following fall, and planted them with complete success. I have last fall planted out a layer, made last summer, from a graft made the preceding March. This layer is as large as a man's finger, and the part that was in the ground

(about two and a half feet long,) as full of fine roots as any one could wish to have.

My reasons for suspecting that the Isabella is not a native of this State, is, that in the very place of which it is said to be a native, no one knows any thing about it, as a native, though it is perfectly well known as a cultivated Also, that I understand its having been imported many years since by a gentlemen in this State, long since This, if it were clearly proven, would, of course, finally settle the dispute. Also, that it does not thrive as well here as at the North. As for Mr. Prince's mode of judging by its old bark getting loose every year, which he says is peculiar to the American vines, I think his observations have not been sufficiently accurate; for many of the imported vines, indeed all of them, more or less, lose their old bark. It is true that the Isabella loses it more completely than most other kinds. The Bland's or Powell's Madeira, is supposed by some to have been raised in Virginia, from the seeds of raisins, which is very possible, and may, therefore, have a very near resemblance to an imported one, if not a perfect identity of characters.

On the subject of grafting, I generally graft vines in the cleft, about three or four inches below the surface of the earth; but on very large native roots, I have sometimes tried Mr. Dufour's plan, of boring in the stock with a gimblet, and insert the scion, after having cut it so as to fit the hole, and leaving a shoulder of the bark and such part of the wood as was necessary, to shave off to fit it to the hole. When the root is large enough, I have in the same inserted two, or even three scions or grafts. In grafting in this manner, nothing more is necessary besides what is related above, than to cover the stump with clay, well mixed with some cow-dung, about one inch up the graft, and cover the whole with earth, so as to leave only one bud out. The graft for a large stock, ought to have three buds, two will suffice for ordinary ones.

My Madeira vine is not the same as Prince's Violet Madeira; but it is the same as that called by some Warren (or Warrington, perhaps.) It is the best grape which, as yet, I have tried for Wine. I find it no disadvantage at all, that my grapes ripen as early as they do, and during very hot weather. It is true, that in consequence of this, the fermentation goes on very briskly, and sometimes violently;

yet I never found any difficulty with it. I only take care to close the vessel as soon as the noise of the bubbling is no longer heard, leaving by the side of the bung a gimblethole stopped with a peg, which must be occasionally taken out and loosely returned into the hole, gradually stopping it. I formerly anticipated some difficulties on this score, and I intended to obviate it by seeking a more suitable temperature below the surface of the ground, that is, by digging a deep cellar, for the purpose of fermenting my Wine; but my experience has fully shown that this additional expense is needless. Why, therefore, they should have ceased to cultivate the Auvernot in France, on account of its ripening too early, as you state has been done, I cannot conceive, unless it be that this grape, not ripening at the same time as their others, it occasions a very great inconvenience. have made Wine for six years, and never have experienced any very great disadvantage from the fermenting my must in hot weather, in my cellar, only dug about one foot below the surface, so that the difference of temperature between it and the house is only two or three degrees. know that this is contrary to the rules given in all the books I have seen on the subject of fermentation; but, if fermentation will go on properly for me in spite of all the rules laid down, I cannot help it.

I should much like to have the grape which you state having procured at Lancaster, Pennsylvania, taken from an Island in the Susquehanna, and I beg you will put me in the way of getting it from that place, for I despair of ever getting it from you, unless it were sent to Clarleston, South-Carolina, by the way of New-Orleans, which is the only route by which we can fully make an interchange of what each of us has that is worth sending so far. In this case, the cuttings would have to be made of full length, viz: from eighteen inches to two feet, with the ends sealed and packed in a box with fresh moss; and this must be done in the fall, for if you wait till the frost permits you to open the ground in the spring, they would arrive here two months later than they ought, besides which, they would have grown and filled the box with young shoots, which would be too tender to be exposed to the open air, and would, moreover, run the greater risk of being broken off. If there is a possibility of communication by this route, inform me of it,

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and next fall I shall do my part here, while you are doing your's there.

I do not think it adviseable in this country, where Wine bears a good price, to reduce the quantity, by evaporating the superfluous moisture of the grapes or of the must, when they do not contain a sufficiency of saccharine matter to make a sufficiently strong Wine. A much more suitable method is, to add Sugar according to the deficiency; by this means the quantity of Wine is rather increased than diminished. I never have seen but once, mashed grapes or must so full of saccharine matter, as to be very thick and not able to ferment, and this was in Pittsburgh, Pennsylvania, about thirty-five years ago. Having found an exceedingly fine wild grape in the woods near the city, I gathered enough to make about ten gallons of Wine. The grapes were so rich that, though I kept it about two or three months, it never fermented, and I never thought of adding water, or such other ingredient as it might have been deficient in, such as tartar, mucilage, &c. to it, which in all probability would have answered the purpose. I should now give a great deal to have this grape here; but on a visit to that place about fourteen years since, I looked for the vine, but found a house where it used to grow. Such a grape is worth a journey of one thousand miles to obtain it.

I do not know Major Adlum's Catawba, but I expect to get some this spring. He certainly esteems it very highly, if he says that his introducing this grape is as beneficial to the United States as if he had paid the national debt. Although this is setting rather too high a value on his services, he is highly deserving; but this will not be appreciated until it is too late for him to derive any advantage for all his exertions, at all commensurate with his deserts. I cannot say, however, that I admire his making imitations of all the most renowed Wines. This looks to much like quackery, and is unworthy of his merit. Why not be satisfied with any good wine, sui generis, which the country, soil and climate permit to make, and which, though different, may be of equal value, or perhaps superior to the imported ones?-This brings me to notice your scepticism as to the influence of exposition and the nature of the soil, on the quality of the Wine. Your's is almost an unpardonable apostacy on the received doctrines, and I am in hopes that, if you are not open to conviction from the experience of others, your own will compel you to recant before long. I am so fully convinced of the influence of the soil on the Wine, that nothing but an experience longer than my future life will probably be, could possibly satisfy me of the contrary, and that I hesitate not to assert that no traveller in Spain whom you mention, who says a clay soil is best, and a gravelly soil is the worst, but has stated precisely the reverse of the truth, and the gentleman whose account I have read, depending solely upon verbal inquiries, has exactly taken the contrary of the information given to him. He certainly misunderstood his informer, or the latter misled him through mischief. A light loose soil, through which the roots of the vine can pass freely and deeply, is most certainly the best, and the stiff clay the The vine may grow very luxuriantly in a rich, moist soil, but its fruit will be found small and poor. A mixture of both soils may perhaps be the best for the production of very abundant crops; but, except in very particularly favoured spots, the quality will be found indiff rent. gards exposure, there are certainly many exceptions to the general rule, and the most remarkable one is, that a part of the best Champaign Wines are produced from vineyards, exposed to the North; and this is the more striking, as this part of the province of Champaign is nearly the last vineyard towards the North. High and open places, and the sides of hills, are also considered a sine qua non for a vineyard, and yet some of the best vines of Burgundy are produced on level ground, though probably high. These anomalies, besides many others which might be named, however, only show that the other circumstances of the excepted spots are in every other respect extremely favoura-Now, in this country, where the heat of our summer is so intense, I think that other things being suitable, a Northern exposure may be advantageous; but on account of the very heavy rains of our climate, I do not think it advisable to establish a vineyard on the steep side of a hill; though in Europe such a situation would be considered eli-Indeed we must always suit ourselves to circumstances which are peculiar to us, and in this, as in every thing else, experience is the best guide.

By the description of your soil, it does not appear to me to be the very best; but if it be very dry, and the clay not too retentive of water, it may very do well, particularly as you have been at the expense of trenching it three feet deep, and you really deserve to succeed.

I do allow my Wine fully to ferment, first in the vat with the stems, seeds and skins, for about twenty-four hours, which is a very short time, though I fear in the very hot weather during which I must ferment it, that a longer time would injure it. After this, the juice or must, is put in casks, not filled by four or five inches, and the bung-hole merely covered with a few grape leaves, loaded with a double hand-This acts as a valve, and the ferful of moistened sand. mentation goes on audibly for two or three weeks more.— During this interval the casks are gradually filled, till at last, when the sensible fermentation has stopped, they are filled to within an inch or so, and bunged tight, not forgetting the gimblet-hole by the side, as mentioned above. Six or eight weeks after this, taking advantage of clear and cold weather, I draw off the Wine into other casks, prepared by being fumigated with a sulphur match.

Cuttings, with one single bud, will not do well here without a great deal of trouble and attention, on account of our very dry and hot springs, unless a place is selected where they could be conveniently watered, until they have sent their roots sufficiently deep to do without it. Otherwise, it is an admirable method of multiplying vines very extensively.

I have the Scuppernong grape, but it does not do well with me as yet, probably, because I did not plant it in a suitable soil. I am planting some this spring in a moist, sandy place, where I hope they will do better.-The Clendenon vine to which you allude, resembles it only in the colour of the bark. None of the Scuppernong Wine which I have tasted, please my palate, and it is liable to produce headache, which is probably owing to its being unskilfully made, and to have an admixture of peach or apple brandy. The grape is very sweet, but has too strong a taste of honey, which remains in the Wine for several years, after which, it certainly improves. I think with proper skill, and no brandy of any kind, but especially peach brandy, a very good Wine might be made of this grape. I am decidedly of opinion that brandy added to Wine is destructive of some of the best qualities of Wine. If there be a fear lost the Wine be not strong enough made of this or any other kind of grape, it must be for want of saccharine matter which may be lawfully added, provided

it be done in the vat, so that the whole process of fermentation will go on with the Sugar, by which means it is converted into alcohol, and forms an identity with the Wine; whereas, when brandy is added, it is always a mechanical mixture, unless, perhaps, it should be added in the vat, which I have not tried.

The Sugar does not make the Wine sweet, but strong bodied. If it were added after the fermentation is over, it would then make a sweet Wine. When, however, the vines have acquired a sufficient age, and the grapes are allowed to get fully ripe before they are gathered, they will, most probably, contain a sufficient quantity of Sugar, without any furthur addition. At any rate, a light wine, if strong enough to keep perfectly sound, is preferable.

I am, respectfully, your's,

N. HERBEMONT.

ART. VI.—Interesting Letter, with facts relating to the Culture of the Sugar-cane in South-Carolina and Georgia; by THOMAS SPALDING, Esq.

OBSERVATIONS BY THE EDITOR.

The Editor having in conversation learnt that the effect produced on some planters' minds, was similar to that stated by Mr. Spalding in the present letter; and a gentleman of great respectability having also stated to him, (the Editor,) that Mr. Spalding himself was reported to have often failed in granulating his cane juice. Satisfied that the report originated in the ill-founded prejudices of some person ignorant of agriculture, he decided on ascertaining facts, and the following interesting communication is the result. The Editor intended at first to have kept back the certificate of the overseer as unnecessary, believing that every gentleman in the country would have taken Mr. Spalding's word in evidence; but to prevent the slightest pretence for cavilling, he has decided on acting in conformity to Mr. Spalding's J. G. own liberal views.

Dear Sir, - In recurring to the next object of your letter. I must confess that I felt like yourself, regret at the article upon Sugar, in the "Southern Review," of May last, because I believe, it would, in the main, tend to strengthen the prejudices of some that were already prejudiced upon the subject, and abate the zeal of those who may be able, and might be willing, to commence the cultivation of the cane in South-Carolina. But I believed when I read this article, and still believe, with you, that this was not the intention of the enlightened and patriotic Editor of that Review; but rather to put down the wild and extravagant expectations which might be created, by the publications which from time to time were made in the newspapers of Georgia, Alabama, and Florida, upon the great products obtained from small portions of land in cane, with cheap, feeble, and incompetent apparatus. I had, myself, felt alarm at these publications, because I knew them to be exaggerated, or at least inapplicable to operations upon a large scale.

But the writer has been misinformed upon some of the facts contained in that Review, which it is important therefore to have explained. Major Wood and Mr. James Smith, were, after myself, among the first persons who cultivated the cane as a crop; they grew their cane, which was the green or Otaheite-cane, upon river lands; their fields were mingled with, and surrounded by their Rice-fields, and not very deeply drained. They, the first season, as every one so situated would have done in any climate, found difficilty in making Sugar; they had no guide but what was offereded by one of Major Wood's negroes, spending six or seven days in my boiling house. They turned, in their disappointment, from Sugar to the manufacturing of Syrup, of the weight of Molasses, for which they found a ready sale, at a price which gave them from 50 to \$90 per acre; they were satisfied with this return, and although in each successive year since, they have made some Sugar, they have persisted, because they have been satisfied with the other result.-Maj. Butler's estate has been making Sugar, on river lands, for fourteen years. Dr. Tunno has been manufacturing at Major Butler's works, for several years past, an acre of cane for his own and his plantation's use, which has given him from 1000 to 1300 lbs. of Sugar. It is a mistake, therefore, to suppose that the cane jnices are weaker here than in Louisiana, or the West-Indies—they are not so.

It would be much more difficult to make fair Sugar from the cane grown upon the river lands of Demarara and Surinam, when first reclaimed, than from the river lands of the Mississippi or the Alabama, because the forests arrest that vegetation which is kept up in such soils, by tropical heat and tropical moisture. For you will understand, that the cane is employed in all countries to make Sugar, before it has perfected itself; after it has tasselled (arrowed) or thrown out the small cane which is its seed, from the top, it is no longer fit for the purpose.

That men of science should have taken up the impression that the juices of cane are weaker here than elsewhere, is the more extraordinary to me, as it would seem that there were indications enough to have led them to a different conclusion. The ameliorating effects of frost upon the juices

of all fruits must have been known to them.

The powerful and continued heats of our August and September, just that season when the cane is developing itself, must have been felt by them. But reasoning apart, the fact is, that hundreds of persons upon the banks of the Altamaha, and its tributaries, are making fair Sugar, without the aid of either lime or alkalies; a degree of concentration in the cane juice quite uncommon in the West-Indies, as one of the extracts contained in the Review will shew.

On my plantation, since the year 1812, there never has been one kettle of juice which has failed making Sugar; and, the hurricane year, (1824,) excepted, of making Sugar of a fine quality. I send the affidavit of my Overseer for eleven years past. It really appears ludicrous to discuss this subject at this date. Col. Blunt, who has been making Sugar of a fair quality for five years past, within eighteen miles of Milledgeville, without using lime to granulate.—Governor Randolph and myself, returning in the spring of 1827, from Tallahassee to Milledgeville, saw some acres of cane manufactured into fair Sugar, by a Mr. Livingston, near Hartford, upon the Oakmulgee, without the use of lime or alkali to granulate; either of these situations are colder than Charleston or its vicinity.

If any remain incredulous still, let them bruise in a mortar, and then express and strain in any manner they please, a quart of juice from the cane brought from Cuba, and the same quantity of juice from cane grown in Carolina, atter the leaves have been blighted by the frost, remembering to take the lower part of the cane, and from wholesome unmanured land. It will be seen that if an hydrometer is suspended in a quart of these several juices, it will rise as high in one as in the other; and the experimenter may be assured, whenever the hydrometer (loaded with quicksilver,) rises above the mark (seven) 7, he can make Sugar; for if this instrument is not an absolute measure of the sweets of the Beat juice, it is an absolute measure of the sweets of the cane, if ten years' daily use in my Sugar-house authorizes me to say so.

All prejudices will pass away with the present season; for after experimenting upon a small scale for years, Mr. Couper, Mr. S. King, Dr. Tunno, and others, have gone into the growth and manufactory of Sugar, upon a broad and extended scale, on the river lands of the Altamaha and other

low grounds.

Nor must you take all that the refiners say as true, upon the quality of Louisiana Sugar; it is not so hard and firm in its grain as what is grown upon the higher and lighter lands; but take it in its whole, it is equal, at the same age, to the mass of Sugar grown in any other quarter of the world. This the refiners deny, because they, as the duties are now arranged, between the drawback and the treacle, (or drainage,) actually derive profit from foreign Sugars. But what then, they are manufacturers, and had a right to participate in the spoil of the day.

Lhad believed that I had stated long ago, all which it was proper for me to say upon Sugar, but as the subject has been again introduced, I will not conclude this paper without making some observations upon the French system, as described in Dubrunfaut's work, alluded to in the "Southern Review." I have read this book twice, most carefully through, but found nothing that I believed we should adopt in our country; the process is too complex and too slow for our time and our means. A Louisianian would, with less apparatus, have made five hundred thousand pounds, while he was making one hundred thousand; nor are the frequent filterings he recommends, necessary for cane juice, but in my opinion, injurious. Fire is so much the cause of colour in Sugar, that no increased purification arising from the process, would compensate for the additional time that the juice would be exposed to the fire, from having been allowed twice to cool Nor do I think that the price of raw Sugars in America will admit the employment, profitably, of sulphuric acid and animal charcoal, in the preparation.

But lastly, there has been a report during the year, to the Institute, by three of its members, in which a preference is given to the Colonial method, in contradistinction to the French, in the manufactory of even Beet Sugar; that is, in the use of lime and alkalis, to clarify the juice and prepare it for dissication, rather than sulphuric acid and animal charcoal, with the more dilatory process.

The most extraordinary circumstance in these French works, is, that they appear to have been totally unapprized of Mr. Flowerd's mode of refining Sugar, (in vacuo,) under a low temperature, and which has made all menstruum, but soft and pure water, unnecessary. This process is alluded to in the Library of Useful Knowledge, and in part described in Dr. Arnaut's late valuable work.

State of Georgia, City of Darien. R. Gould, who being sworn, states, That he has managed for Mr. Thomas Spalding on Sapelo-Island, for eleven years, and that part of the crop was planted in Sugar-cane, and that they never failed in making from sixty to one hundred tierces of Sugar per year; and that in the whole of this time he never failed making Sugar of a strong grain from any one kettle of juice.

THOMAS K. GOULD.

Sworn before me, this 2d day of November, 1829.

ARMAND LEFILS, J. P.

ART. VII.—Useful Hints in Planting Potatoes, by Practical Planters.

"To the EDITOR of the SOUTHERN AGRICULTURIST.

Having for the last ten years used every means and mode recommended by different planters, as well as what my own observation had discovered, and experience proved to be the best mode of raising the Sweet Potatoe, I would herein subjoin the following remarks.

I am well assured that a great deal depends on the land that they are planted in-I allude here particularly to the quality of the soil; for at once I shall condemn yellow clay soil, (I mean on the Sea-board,) as by no means congenial to their growth. Stiff, blue, clay is next unsuitable, and any description of black soil is most unpropitious to their product. I know not of any mode or system of manuring, to make this last description of soil produce any thing like a fair crop. I have heard, and experienced it too, the ill effects of planting Potatoes in a high, light and lose soil, unless it be first well manured and trampled by cattle. Bright red, or yellow sandy soil, is the most congenial to insure a certain crop, when properly manured. But the most productive soil is that which is somewhat mixed with blue clay, and aided by manure. But let me observe, that the last four years' experience has proven unequivocally, that an abundant crop of root Potatoes can be made from high, light land, by pursuing the following method: In the month of December let the land be listed up heavily, and so remain until January, at which time put on from four to six horsecart loads of unrotted Cotton-seed, to each quarter acre, and before spreading it, let the listing be chopped flat, then spread on the Cotton-seed, and bank it up immediately, forming the beds as large, at once, as ever they are to be. By doing this so early, the beds have ample time to settle down and become compact, before the Potatoes are planted, and the hoeing commenced; this, together with the undeniable fact of the Cotton-seed rotting in the bed and imparting all its manuring qualities to the ground at once, where it is wanted. This mode does away the old practice of rotting Cotton-seed in holes, and in pens, which tends to much loss.

Another great cause of failure in a root Potatoe patch, is late planting; they ought to be planted by the 10th of March, at the latest dates, and sooner, if the weather be favourable.

AN ISLAND PLANTER.

August 5th, 1829.

" Beaufort Sept. 10th.

"To the Editor of the Southern Agriculturist.

Sir,—I am not a subscriber to your valuable work, but am a friend to any thing that looks like improvement in agriculture. It is your wish that every one will contribute their mite—for those reasons I send you this communication, and I hope some of my brethren planters and farmers, as they may be termed, may benefit from this.

An acquaintance of mine informed me that he planted Oats in a very poor piece of land, and after the Oats were cut, he planted slip Potatoes. He continued doing this for three years, and the fourth year he made a fine crop of Corn on the same land. If you think proper you can publish this.*

A FRIEND TO AGRICULTURE.

ART. VIII .- On Hulling Cotton-seed; by A.

"To the EDITOR of the SOUTHERN AGRICULTURIST.

Dear Sir, - I lately had an opportunity, (for which I must thank Mr. B. R. Smith, of your city,) of witnessing the operation of the machine for hulling Cotton-seed, invented by Mr. Follet, and owned by Messrs. Follet & Smith, of Petersburgh, Virginia. Mr. Faber Smith, some years since entertained the idea that oil might be expressed from Cotton-seed. He made the attempt, and the result of his experiments was an oil which answered very well for painting. Three years ago, the Cotton-seed oil was used in painting a house in Petersburgh, owned, I think, by Mr. Smith.-Since then, Mr. S. has turned his attention to the preparation of the seed by hulling, with a view, the more readily, to obtain the oil. He was so fortunate to enlist, in prosecution of his design, the mechanical genius of Mr. Follet. and the machine which is now in successful operation, is the joint property of these two gentlemen.

It occupies a space of about twelve feet by eight, horizontally, and is about eight feet high. Attached to the Cotton-gin of Mr. S. "this machine is worked by a power" which he supposes to be "equal to that of three horses, and prepares at the rate of two hundred and forty bushels of

^{*} This is a common plan, but ought to be improved into a system of rotation, regularly and well manured We recommend again the plan practised in the upper country of scattering Cotton-seed on the surface, broad-cast, on the Oat crop, and we hope its simplicity will induce a trial.

J. G.

seed a day, which is equal to eighty bushels of kernels, and these equal to a hundred and sixty gallons of oil.

The oil is expressed in New-York at 15 cents the gallon, with the oil-cake, or 5 cents when the oil-cake (which is excellent food for hogs,) is retained at the mill. There is some little additional expense incurred in refining the oil for lamps and machinery As a paint oil, it is at present a little darker than the oil of Flax-seed so as to be perceptible in very light colours; this," he thinks, "is owing to the kernels being heated for expression, by a common heat. He is making arrangements, by the use of steam, to obviate this objection. The price of this machine is \$150. Gen. Williams, of Darlington, has ordered one, which will be forwarded soon."

The operation of this machine in my presence was a half bushel measure of kernels in four minutes and twenty seconds, which was considered slow. They were very little broken.

Not being a Cotton-planter, I should like to be informed through the medium of your journal, of the precise value of Cotton-seed, as a manure, so that the relative advantages of this machine may be established. The current price of Flax-seed oil, for which the Cotton-seed would be substituted, must also be taken into the account. Messrs. Follet & Smith speak of offering their patent for this State, to the Legislature; now our treasury is so poor, that unless the utility of the oil and the profit of converting the seed from manure to this use, are fully demonstrated, I apprehend the Legislature will have nothing to do with it.

PART II.

SELECTIONS.

ART. I .- On Salt as a Manure.

OBSERVATIONS BY THE EDITOR.

The following very excellent article on a question we undertook to discuss, (p. 351,) is from the "New-England Farmer," a work of merit on the husbandry and rural employment of that part of the United States, where it is published. We are confident that it will be read with interest by many of our friends who differed from us so entirely in the month of August last, and we prefer republishing this to giving the result of any researches of our own, because it affords additional evidence of public opinion elsewhere.

We then undertook to show the reasons why in England salt has been cried up as a manure, and we will now very briefly state them, for we can only do it thus at this late pe-

riod of our labours.

In England, the price of salt, which at the first hand costs but four or five pence sterling, per bushel, was raised by a government tax to sixteen shillings, sterling, per bushel. It was a matter of great importance to the community to get this tax repealed, and the farmers strove hard to have it accomplished, by representing it as essential to the prosperity of the country, to obtain the use of it as a manure. In their endeavours they were assisted by the owners of salt-works. who expected to increase the consumption immensely, by the great fall in price, if the tax was taken off. Through their means, the assertions and representations of farmers, and others were collected from all quarters and embodied in pamphlets, memorials, &c. all of which were laid before parliament, and were successful. The farmers having procured the repeal of the salt tax, abandoned the use of it as a manure. The proprietors of salt-works, unwilling to give up its enriching qualities to them, namely, the sale of it for

manure, continued to use their influence by still spreading the report of its usefulness to the agriculturists abroad.

We think a few experiments, tried by any planter who has doubts on the subject, on Cotton-plants, or any other plants raised in flower-pots, would satisfy them, and put the question at rest; for they might see the difference between those watered with salt-water, or manured with salt, and such as might be watered with the drainings of a cow-pen, or manured with well-washed marsh mud, particularly if the soil used should be, as it ought to be, a sterile sand, for the better illustration of the truth.

J. G.

"There have been few subjects relating to agriculture, which have been more controverted than the question relative to the value of salt as a manure. To recommend salt as a fertilizer, pamphlet after pamphlet, essays, which cannot be numbered, and treatises long enough to tire the patience of the most dogged disciple of dullness, that ever dozed after dinner, have been poored on a patient public, from 'time whereof the memory of man runneth not to the contrary,' down to the present enlightened period. But, notwitnstanding salt has been so highly extolled, the sentiments of the most scientific and experienced cultivators, who have written on the subject, within the last eight or ten years have been against its use as an application to land. They say, in substance, if salt alone, were in all cases a valuable manure, we could not have barren sea coast. All lands subject to the saline influences of the sea must become as rich as if they were pervaded by the drainings from a farm-yard. Cape Cod would be as fruitful as 'Araby the blest,' and many a mile of naked beach, which hardly exhibits a trace of vegetation, would be as fertile as any mixture of soil and manure can possibly render the earth's surface.

"A writer in the 'Farmers' Journal,' printed in London, in treating of the value of common salt as a manure, states, that 'A rich sandy loam, a poor sandy soil, a strong, clear, barren peat-moss soil were severally manured with salt.—Each variety of soil was treated and cropped in the same way. On each of these soils salt was applied in various proportions from five to sixty bushels per acre, and upwards; these proved to be two extreme points; for five bushels per acre were productive of no apparent effect whatever, while sixty bushels produced absolute sterility.

"'To grass land the salt was applied by scattering it over the surface with a shovel, in the manner of applying powders ed caustic lime in its simple state. It was applied to the grass land in October, and also in March.

"'To the soils above mentioned, in tillage, salt was applied as follows: 1st, simply by itself; 2d, combined with lime; 3d, combined with spit manure; 4th, combined with

long dong; 5th, combined with oil-cake dust.

"'The mode of application was varied as follows:-1st, by scattering it on the surface simply, and also combined with manure, and ploughing it in previous to sowing the seed; 2d, depositing it (in these different states) in the seed bed along with the seed; in some instances broad-cast, and in others in drills; and lastly, applied to the surface after the vegetation of the seed, or of the appearance of the plants above ground. Different proportions of salt and spit manure, long dung, and of clay, were also respectively mixed up in heaps, and suffered to remain for several months, in order to ascertain whether any or what change might be effected by salt in the process of decomposition, either by hastening or retarding its progress; similar heaps of these substances simply, or without salt, being placed side by side for the purpose of obtaining comparative proofs. I may also add that salt in solution of various degrees of strength at the proper season, was applied as a topical remedy for the rust diseases of Wheat.

"'The grain or white straw crops manured with salt, were Wheat, Barley, Oats, Rye and Indian Corn; Turnips, Mangel Wurtzel, Carrots and Potatoes, of bulbous and tuberous roots; Peas and Beans of the leguminous or

pulse crops; and Flax of the oily seed crops.

"The general result of all the trials, which were continued three years, proved that five bushels of salt per acre, under any circumstances of soil, mode of application, or kind of crop, had no sensible effect whatever on the growth of those different crops; and that when the quantity of salt applied reached to sixty bushels per acre, vegetation did not take place at all, but absolute sterility was the consequence. At harvest, when the crop should have been reaped, the seed was found in the soil in as sound and perfect a state as when sown in the preceding spring. This quantity of salt, however, when mixed with spit manure, and dug in, previous to sowing the seed, proved less injurious, as a few seeds vege-

tated and grew. In the following spring, this piece of land, rendered barren by the application of sixty bushels of salt, applied with the seed, was dug and sown with Turnips; the seed vegetated some days later than that sown on the adjoining land, to which no salt had been applied; but the Turnipfly made its appearance on the salted and unsalted land at the same time, and was equally successful in its ravages on both crops. In every other trial, salt proved of no use whatever in preventing the Turnip-fly, or checking its destructive progress. The next following spring the land was sown with perennial red Clover; and comparing the vegetation of this seed, and the progress of the plants, on the previous sterile land, with those sown on the unsalted land adjoining, the progress of the plants on each land was so uniform and equal as to prove that the sterile effect of the salt had disappeared.

"'The various modes of applying salt above mentioned, and the various kinds of crops submitted to its influence, all tended to confirm the opinion, or rather prove it to be a fact, that salt retards the vegetation of seeds, and if applied in too great a quantity, destroys vegetation altogether; and that salt renders manure, properly so called, less active and less beneficial to the plants; and also, that the sterile effect to the soil is not lasting.

"'The only benefit accruing to tillage land from the application of salt, was apparent in the instance of the rich clayey loam, and rich sandy soil; here the straw was light and the sample fine; the produce from the same soils without salt, consisted chiefly of rank straw, with a light shrivelled sample of Corn. The fact was that the soil was to rich and highly manured to grow Corn, and the salt in this instance, so far reduced its over fertile state, as to render it suitable for the production of grain. Farmers, however, I believe, have seldom reason to require a remedy for over richness of soil.

"Beans and Flax seemed to feel the sterile effects of salt more than any of the other crops above named. A smaller quantity than sixty bushels of salt per acre, sown with the seed, rendered the soil so barren that it retarded the vegetation of the Beans and Flax. Carrots hardly seemed to feel its effects after the vegetation of the seed; the fact is, that the root penetrates deep, and soon passes beyond the reach or

influence of the sait when applied with the seed, or to the surface of the land.

"When salt was applied to grass land at the rate of five bushels per acre, no effect whatever was perceptible; but when applied at the rate of from sixty to one hundred bushels per acre, the grass was speedily destroyed, and did not again recover for that season, nor indeed till fresh grass seed had been sown and a tan dressing of manuar

been sown and a top dressing of manure.

"'The rust in Wheat generally makes its appearance just about the period when the Wheat comes into flower.— Solutions of salt of various degress of strength were applied to the crop previous to any appearance of the disease, and also after the symptoms became confirmed. A very weak solution had no effect whatever, and a solution strong enough to destroy the fungus, or rust, destroyed also the plant of wheat itself.

"'Common salt, in a state of perfect purity, consists of soda 44, muriatic acid 50, and water of chrystalization 6-100; but then common salt, such as we buy it, even for culinary purposes, is never pure, but combined with various proportions of muriatic of magnesia, sulphate of magnesia, and sulphate of lime; the first mentioned substance is very deliquesceut, and attracts moisture from every thing near it; hence the appearance of land where common salt has been applied; after rain it appears dark coloured and damp; during dry sunshine, white and powdery. A consideration of the nature of neutral salts, and of the vegetable economy, might have led us a priori to the conclusion which the actual experience of salt, applied as a manure, has demonstrated.'

"The above experiments appear to have been made with care, very much diversified, on a large scale, and for the express purpose of ascertaining what value, if any, can be attached to salt as manure. The result was not in favour of salt, either as a fertilizing substance, a preservative against mildew, or a destroyer of insects. Other trials, both in Europe and America, give corresponding results. Mr. William M'Martie states in Loudon's Magazine, vol. iv. p. 456, that he tried salt on half his carrot grounds, at the rate of a cubic inch to a square yard, and that 'the part that was salted did not differ at all in appearance from that which was not, with regard to the growth of the tops. When

^{*} Apply this to the supposed beneficial effects on Cotton—which is also a tap-rooted vegetable.

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the crop was taken up, I could not perceive that there was the slightest difference in the two parts; therefore, it would appear that that quantity of salt to a square yard does neither good nor harm. I sowed the same proportion upon the surface of my shallot ground, after the shallots were above the ground, with the idea that it would prevent that rot at the roots, which they are so subject to; but I could not perceive that it had any effect whatever. In the month of March, I also sowed four square yards of grass with salt, in the pleasure ground, to see what effect the different proportions would have on its growth. In the first yard I strewed one cubic inch over it; in the scond two; in the third three; and in the fourth, four cubic inches. In the first and second yards, the salt had no perceptible effect; in the third yard, the salt retarded the growth for a short time; but the effect the quantity had upon the fourth yard was very plain indeed, turning it quite yellow in about ten days after it was put on. It was not sufficiently powerful to kill either the moss or grass, which continued in that sickly state till autumn; and at this moment I cannot perceive the slightest difference in the appearance of all the four yards.

"'I have used it successfully, put on in a large quantity, in destroying weeds on approach roads; but it must be done annually, to have the effect of keeping such constantly clean. I would not recommend its being laid on garden walks for that purpose, as I lately witnessed the box-edgings of a garden completely destroyed by it. In paved courts, or stable yards, it might be used successfully in destroying the grass, weeds, &c.; and being now so cheap an article, it would be a considerable saving, compared with band-weeding. In short I have a higher opinion of its destructive qualities than of its vivifying properties, at least as far as I

have seen it applied.'

"J. Kenrick, Esq. of Newton, Mass. in a communication, published in the 'N. E. Farmer,' vol. iv. p. 138, states, 'I dissolved a bushel of rock salt in water, and with a water pot applied it on a part of my nursery, where the rows were four feet apart, and the ground much inclined to weeds, at the rate of sixteen bushels to the acre. I also made an experiment in another part of the nursery, where the soil was different, and a soft loam, by sowing two bushels of coarse-fine salt, at the same rate of sixteen bushels to the acre. Again, I made another trial, by sowing a single quart on a

square staked out, upon a knoll I had just sowed with hay seed, and Indian Corn for fodder, and rolled down, and in the same proportion to the acre. I know not what appearances may be in future; and can only say, no sort of effect has been visible as yet.'

"A writer for Loudon's Magazine, vol. v. p. 444, in an article dated in Philadelphia, May, 1828, says 'Common salt has been tried here on Asparagus, but the effects found

quite otherwise than very beneficial.'

"It would be easy to multiply testimony for, as well as against the use of this article as manure; but we believe the

majority of modern authorities are against its use.

"Manuring land, is providing food for the vegetables which you intend shall grow on the land manured. You can no more feed your plants with salt than you could your sheep and horses. Salt is a condiment, like pepper and spice, not an article of food like roast beef and boiled potatoes.— Salt is not an article in great demand by a growing vegetable, because little of it can enter into the composition of such vegetables. Vegetables are composed, principally, of carbon, (coaly matter,) and carbon is the chief constituent of barn-yard, and other manures which are most essential to the growth of plants."

PART III.

MISCELLANEOUS AGRICULTURAL ITEMS.

Kitchen Garden for December.

On stiff clay lands, if the soil is thin where the garden is situated, it ought to be the care of the owner to increase the depth of the mould by every means possible. The following plan we have known to be successful.

Divide the compartments into beds four feet wide, and alleys of the same, but before you break ground, let the beds be well spaded and manured. Then remove all the top-soil out of the alleys and place it equally on the beds, making them up hand-somely. Plant a llsuch vegetables as are tap-rooted, or require

the most soft earth on the beds, while the alleys ought to be dunged and spaded frequently, and planted with Cabbage and other plants according to the season. It happens sometimes that there is a layer of sand under the top layer of clay, when this is the case, good soil is speedily made by mixing cow-pen manure, stable manure, &c. with the earth in the alleys, and spading well. When the beds are to be changed, a tolerably thick coat of trash, grass or dry leaves, ought to be spread in the alleys, and all the earth returned upon them from the beds, which in their turn become the alleys and are treated in precisely a similar plan. A garden conducted in this way for a few seasons, will be found to possess a sufficient depth of mould for every purpose; and from the first, Carrots, Beets, Radishes, Turnips, &c may be grown on the beds to the greatest advantage, while the alleys suit remarkably well for many plants, especially the Squash tribe, Cucumbers, &c.

In the country, green Peas are very generally destroyed during the winter and spring by the rabbits, which nibble them close as fast as they appear above ground. A sufficiently secure fence can be made around the Peas bed, with Corn-stalks, set close together, perpendicularly, in a trench, six inches deep, and left out of ground, to stand two feet high: return the earth into the trench, and press it down with the foot about the Corn-stalks.— These will last long enough for the Peas to be out of danger.

F In this Month,

Sow Peas, Spinach, Lettuce, Raddish, Mustard, Cresses, Carrots, Parsnips, Parsely and Turnips. Plant Windsor and Mazagan Beans. Transplant Cabbages, Cauliflowers, Brocoli and Onions. Tie up, Endive, Lettuce and Cauliflower, (the latter

to guard against frost.)

Observe the same general directions given last month in order to have early spring vegetables, and if a large pile of pine trash is kept in a corner of the garden, it will be found extremely useful to protect from sudden and severe cold, many of the young plants. A small quantity thinly spread about the roots and stems will serve to keep off the frost.

Peas

Ought to be sown once a fortnight to insure the earliest crop. It is a good plan when the plants of the former sowing are just coming up, to sow another crop The Marrowfat ought to be planted full six feet apart. Haul up earth to the Peas, which are two or three, to five or six inches high. Do this only in a dry day, it will protect them from the frost, and give strength.

Spinach, Radish, Mustard, Cresses, Turnips.

Sow all of these in drills as often as may be required, and as before directed, and neglect not to cover them with pine trash, to protect them from birds and from the frost. Do not cover too thick, and keep the plants which are up clear of weeds, stirring the ground as often as wanted, and haul up a little dry earth to such as will bear it.

Onions, Leeks,* Garlic, Shallots, Skallions and Chives

Should be kept clean of weeds and the earth stirred well around them with a small hoe. If you have not already transplanted all your Onions and Leeks, let it now be done in n.il.1 weather, as also setting out all the others where required.

Parsley

Is very long in coming up, lying sometimes six weeks in the ground. It ought to be sown in a bed in drills, nine inches apart, very thin, or as a border to any bed where an edging is wanted. If sown under the shade of a tree and kept free from weeds, we are told Parsley will last a year and not go to seed.—The curled leaved Parsley is by much the best.

Carrots and Parsnips

Ought to be sown in light, free, deep soil. The earth ought to be well trenched, by taking thin spits, carefully breaking them up as they are turned in, and no foot-step ought to be suffered to go over the fresh bed. Sow in rows, nine inches to a foot apart, so that the plants will stand at a like distance.

Windsor and Mazagan Beans.

Some of the latter may be planted for a succession. The Windsor, Kentish Windsor, or Taylor's Windsor Beans are all large and broad, and require rows three feet apart. They are conveniently planted with a small hoe, and ought to be covered two or three inches deep.

Cabbages, Cauliflowers and Brocoli.

Transplant all the plants fit to be set out, and if in dry weather, follow the directions given, page 431. Such as were before set out ought to have dry earth hauled well up to their stems, and to be kept clear of weeds. The size of Cabbages depends altogether upon the richness of the ground—their flavour on being cultivated with old and well-rotted manure. Of the whole tribe the Savoy is the sweetest and most delicate after a frost, excepting the Cauliflower, in fact we prefer it

Endive and Lettuce.

Sow some of the latter seeds for a spring supply. The brown Dutch and brown Silicia, are hardy, but the largest and finest are the *Imperial* and *Grand Admiral*, which some amateur ought to import from London. Transplant, if you have plants, as be-

Omitted before—are to be transplanted as Onions.

fore directed, and tie up the Endive for blanching, and the Let-

In the Southern States, gardens, from the absence of the owner, are too often greatly neglected in summer. As soon as the proprietor returns, if he finds this has been the case, the business of clearing up and planting ought to be begun, and even in this month most of the seeds ordered in the three last, will come up and thrive. Care, as to covering up with pine trash, will go far in making up for lost time, and an abundant garden may yet be afforded to every family, if a single member, male or female, will bestow the slightest attention on it.

J. G.

AGRICULTURAL SOCIETY OF SOUTH-CAROLINA.

RESOLUTIONS proposed by Mr. Horry. Adopted Sept. 15, 1829.

It appearing from an advertisement issued from the "Office of the Commissary General of Subsistence," dated Washington, July 1st, 1829, that although very large quantities of "Fresh, Superfine Flour" are required for the subsistence of the troops of the United States, Rice forms no part of the supplies furnished for the Army,*

Therefore, Resolved, That the Corresponding Secretary be requested, in the name of the Agricultural Society of South-Carolina, to write to the Secretary of the War Department, and to the Secretary of the Navy Department of the United States, requesting that the use of Rice be introduced into the Army and Navy; provided the same be compatible with existing legal regulations. That the Corresponding Secretary do explain to said departments the great advantages and benefits which would attend the introduction of Rice as a part of the food of the Army and Navy; and also the great importance which would result from such a measure to the agricultural interests of South-Carolina, and to the Southern States generally, thereby affording a patronage to the States growing Rice, and an opportunity to them for furnishing and disposing of, for the use of the Army and Navy, a Bread stuff not inferior to any at present known.

Resolved, further, That should it be found expedient, the President of this Society be requested, and he is hereby authorized to petition the Congress of the United States, in the name of the Agricultural Society of South-Carolina, to pass such act or acts, as will authorize and cause the introduction of Rice, as a Breadstuff, both into the Army and Navy, so as to give to Rice proportional consumption with Wheat; and thereby extend a just and equitable patronage to this State, and to other States of our Union which grow Rice, as one of the staples of commerce. Adopted.

^{* 12,130} bbls. of Flour advertised for, for the Army-July, 1829.

OUR SLAVES; BY THE EDITOR, (at parting.)

No question can possibly be more interesting to the Southern planter, than the slave question, nor can any thing more deeply affect the agricultural prosperity of South-Carolina and Georgia than the state of subordination in which our slaves are kept. We intreat at parting, therefore, with the readers of the "Southern Agriculturist," that they will reflect on the necessity of throwing aside all Northern notions on the subject; to remember that a slave in a state of insubordination is an enemy; that in a state of perfect subjection, he is a kind, willing, good-humoured, and use-That a state of rigid discipline does not require frequent punishment, but the contrary; that good disciplinarians, that is, men who punctually visit misconduct with the requisite notice, like a good military officer, seldom have occasion to punish at all-while the relaxed, sentimental covert abolitionist, first begins by spoiling his slave, next becomes severe, which is followed by running away, this again by enormous depredations, ending in the transportation of the unhappy negro; who would have been, under a good master, (that is, one who would have compelled good behaviour,) a valuable labourer, increasing his master's wealth, and the prosperity of the country.

It is a melancholy fact, that a large proportion of our ablest and most intelligent slaves are annually sent out of the State for misconduct, arising from the most erroneous notions of discipline; and we earnestly call the attention of the legislature to this view of the subject as presented from another quarter.

Some of our best friends have admitted the idea that to aid the Colonization Society, would be of advantage to the Southern States. That Society, it is our settled conviction, is an abolition society at bottom. At all events, their attempts at getting rid of the free people are visionary, for they try hard to increase the number of the free blacks by their inconsiderate publications, while they are unable to dispose of those who are already free.

We trust that not a dollar will be contributed from the South,* nor a single individual make the wild attempt of converting evil into good, by such very questionable means as joining a society, which takes such mighty great interest in a property that does not belong to them; we mean the Slaves of South-Carolina and Georgia.

The following notice we publish with pleasure, and rejoice to hear from themselves, the real state of their funds. In like manner we call the attention of our readers to the remarks of Mr. Munroe in the Virginia Convention. It is high time our planters

[&]quot;An extensive planter told us that he believed ten thousand dollars would be well bestowed on this society! We recommend to him and to all, the report to Congress on the subject, which ought to have put the matter at rest with all but the most visionary. To contribute to any Northern Society meddling with Southern black people in any way, is suicide!

put aside all care or thought what Northern people say about them. Let us be independent in this at least!

J. G.

THEORY.

Colonization Society.—The Octo-ber number of the "Arrican Repository" just published, complains that the pecuniary necessities of the Co-Ionization Society were never more pressing than at present A good portion of the recent contributions have been necessarily applied to repay a loan raised in 1827-8 to defray, the expense of several large expeditions to Liberia A still larger sum has been drawn from the Society to repair the fortifications, purchase supplies, and otherwise improve the condition of the colony. Some of the demands recently made on the Association are attributed to the diminishing trade of the factories, which were exceedingly well managed by the late Mr. Ashman, but which have Thus it is, declined since his death. that although hundreds are anxious to emigrate, the means of the Society to transport them to Africa are not equal to what many of its friends have been led to expect from the amount of the late contributions. The Board, however, it is said, still entertain the hope of soon despatching a vessel to the Colony.—N. Y. Evening Past.

PRACTICE.

Mr. Munroe further asked: What has been the leading spirit of this State ever since our independence was obtained? She has always de-clared herself in favour of the equal rights of man. The revolution was conducted on that principle. Yet there was at that time a slavish po-pulation in Virginia; we held them in the condition in which the revolution found them. And what, can be done with this population? If you set them free, look at the condition of society; emancipate them, and what would be their condition? 400,-000 poor, without one cent of property; what would become of them? disorganization must follow and perfect confusion. They are separated from the rest of society by a different colour-there can be no intercourse or equality between them. Nor can you remove them. How is it practicable? The thing is impossible: and they must remain as poor, free from the control of their masters, and must soon fall upon the rest of society, and resort to plunder for subsistence. As to the possibility of emancipating them, it can never be done by the State itself, unless aided by the Union. And what would be their condition supposing they were emancipated? the experiment has been in part tried; they have emigrated to Pennsylvania in great numbers, and form a part of the population of Philadelphia, New-York, and Boston. But those who were the most ardent advocates of emancipation in those portions of the Union, have become shocked at the charges of maintaining them as well as at the effect of their example Nay, sir, look at Ohio, what has she recently done? Ohio acknowledges the equal rights of all, yet she has driven them off from her territory. She has been obliged to do it.

J. D. LEGARE.

The Editorial arrangement made with Mr. Gregorie, to assist in editing this Journal, terminates with this number. It will herenfter be conducted by the subscriber alone.

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